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POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

I hereby appoint:



Practitioners associated with the Customer Number:

047653

OR



Practitioner(s) named below (if more than ten patent practitioners are to be named, then a customer number must be used):

Name	Registration Number

as attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with any and all patent applications assigned only to the undersigned according to the USPTO assignment records or assignment documents attached to this form in accordance with 37 CFR 3.73(b).

Assignee Name and Address:

EMC Corporation
176 South Street
Hopkinton, Massachusetts 01748

A copy of this form, together with a statement under 37 CFR 3.73(b) (Form PTO/SB/96 or equivalent) is required to be filed in each application in which this form is used. The statement under 37 CFR 3.73(b) may be completed by one of the practitioners appointed in this form if the appointed practitioner is authorized to act on behalf of the assignee, and must identify the application in which this Power of Attorney is to be filed.

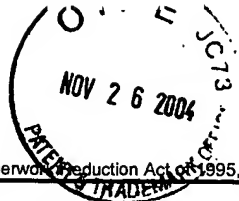
SIGNATURE of Assignee of Record

The individual whose signature and title is supplied below is authorized to act on behalf of the assignee

Signature	<i>Kaish Gupta</i>	Date	<i>11/11/2004</i>
Name	<i>KRISH GUPTA</i>	Telephone	<i>978 266 1791</i>
Title	<i>DIRECTOR, SENIOR COUNSEL</i>		

This collection of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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STATEMENT UNDER 37 CFR 3.73(b)Applicant/Patent Owner: Michael Kowalchik and John CardenteApplication No./Patent No.: 10/004,090 Filed/Issue Date: October 23, 2001Entitled: Data Storage DeviceEMC Corporation, a corporation

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.
The extent (by percentage) of its ownership interest is _____ %

in the patent application/patent identified above by virtue of either:

- A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 012361, Frame 0571, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

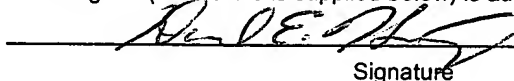
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Reel _____, Frame _____, or for which a copy thereof is attached.
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3. From: _____ To: _____
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Reel _____, Frame _____, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

- ☐ Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.


SignatureNovember 18, 2004

Date

David E. Huang, Esq.

Printed or Typed Name

508-366-9600

Telephone Number

Attorney for Applicant

Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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FEBRUARY 05, 2002

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Washington, DC 20231
www.uspto.gov

FOLEY, HOAG AND ELIOT, LLP
ROBERT A. GREENBERG
ONE POST OFFICE SQUARE
BOSTON, MA 02109



101917196A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 10/23/2001

REEL/FRAME: 012361/0571
NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:
KOWALCHIK, MICHAEL

DOC DATE: 10/22/2001

ASSIGNOR:
CARDENTE, JOHN

DOC DATE: 10/22/2001

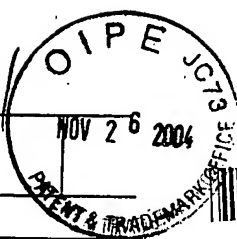
ASSIGNEE:
EMC CORPORATION
35 PARKWOOD DRIVE
HOPKINTON, MASSACHUSETTS 01748

SERIAL NUMBER: 10004090
PATENT NUMBER:

FILING DATE: 10/23/2001
ISSUE DATE:

MARCUS KIRK, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

10/23/01
PTO-1595
(Rev. 6-93)
OMB No. 0651-0011 (exp. 4/94)



12-17-2001



101917196

U.S. DEPARTMENT OF
COMMERCE
Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Michael Kowalchik
John Cardente

Additional name(s) of conveying party(ies) attached?
() Yes () No

2. Name and address of receiving party(ies)

Name: EMC Corporation

3. Nature of conveyance

(x) Assignment () Merger
() Security Agreement () Change of Name
() Other

Internal Address: _____

Street Address: 35 Parkwood Drive

City: Hopkinton State: MA ZIP: 01748

Execution Date: October 22, 2001

Additional name(s) & address(es) attached? () Yes () No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the filing date of the application is: October 23, 2001

A. Patent Application No.(s)

B. Patent No.(s)

10/604090

Additional numbers attached? () Yes () No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Robert A. Greenberg

Telephone: (617) 832-1000

Internal Address: Foley, Hoag and Eliot, LLP

Street Address: One Post Office Square

City: Boston State: MA ZIP: 02109

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41).....\$40.00

(x) Enclosed

() Authorized to be charged to deposit account

8. Deposit account number: 06-1448

Attach duplicate copy of this page if paying by deposit account

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9. Statement and signature: *To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*

Robert A. Greenberg
Name of Person Signing

[Signature]
Signature

10/23/01
Date

Total number of pages including cover sheet, attachments, and document:

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Commissioner of Patents and Trademarks, Box Assignments
Washington, D.C. 20231

12/14/2001 TDIAZI 00000133 10004090

01 FC:581

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ASSIGNMENT

WHEREAS, We, Michael Kowalchik and John Cardente have invented an invention comprising and/or embodying certain improvements or discoveries or both as described in an application for Letters Patent of the United States entitled *DATA STORAGE DEVICE*, the specification of which:

☒ is being executed on even date herewith and is about to be filed in the United States Patent Office;

☐ was filed on _____ as U.S. Application No. _____;

☐ was patented under U.S. Patent No. _____ on _____.

WHEREAS, EMC Corporation (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts and having a usual place of business at 35 Parkwood Drive, Hopkinton, Massachusetts 01748 desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue thereon; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey to ASSIGNEE all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the

-2-

giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals as set forth below:

Date: 10 / 22 / 2001



Michael Kowalchik

Print full name of first inventor:

Michael Kowalchik

Residence:

3 Harvard St.; Arlington, MA 02476

Citizenship:

USA

Mailing Address:

3 Harvard St.; Arlington, MA 02476

STATE/Commonwealth of _____

COUNTY OF _____

Then personally appeared before me the above-named Michael Kowalchik and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this _____ day of _____, 2001.

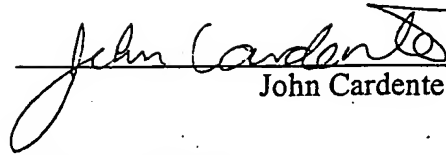
Notary Public

Print Name: _____

My Commission expires ____ / ____ / ____

-3-

Date: 10/22/01


John Cardente

Print full name of first inventor:

John Cardente

Residence:

58 Whitewood Rd.; Milford, MA 01757

Citizenship:

USA

Mailing Address:

58 Whitewood Rd.; Milford, MA 01757

STATE/Commonwealth of _____
COUNTY OF _____

Then personally appeared before me the above-named John Cardente and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this _____ day of _____, 2001.

Notary Public

Print Name: _____

My Commission expires ___/___/___